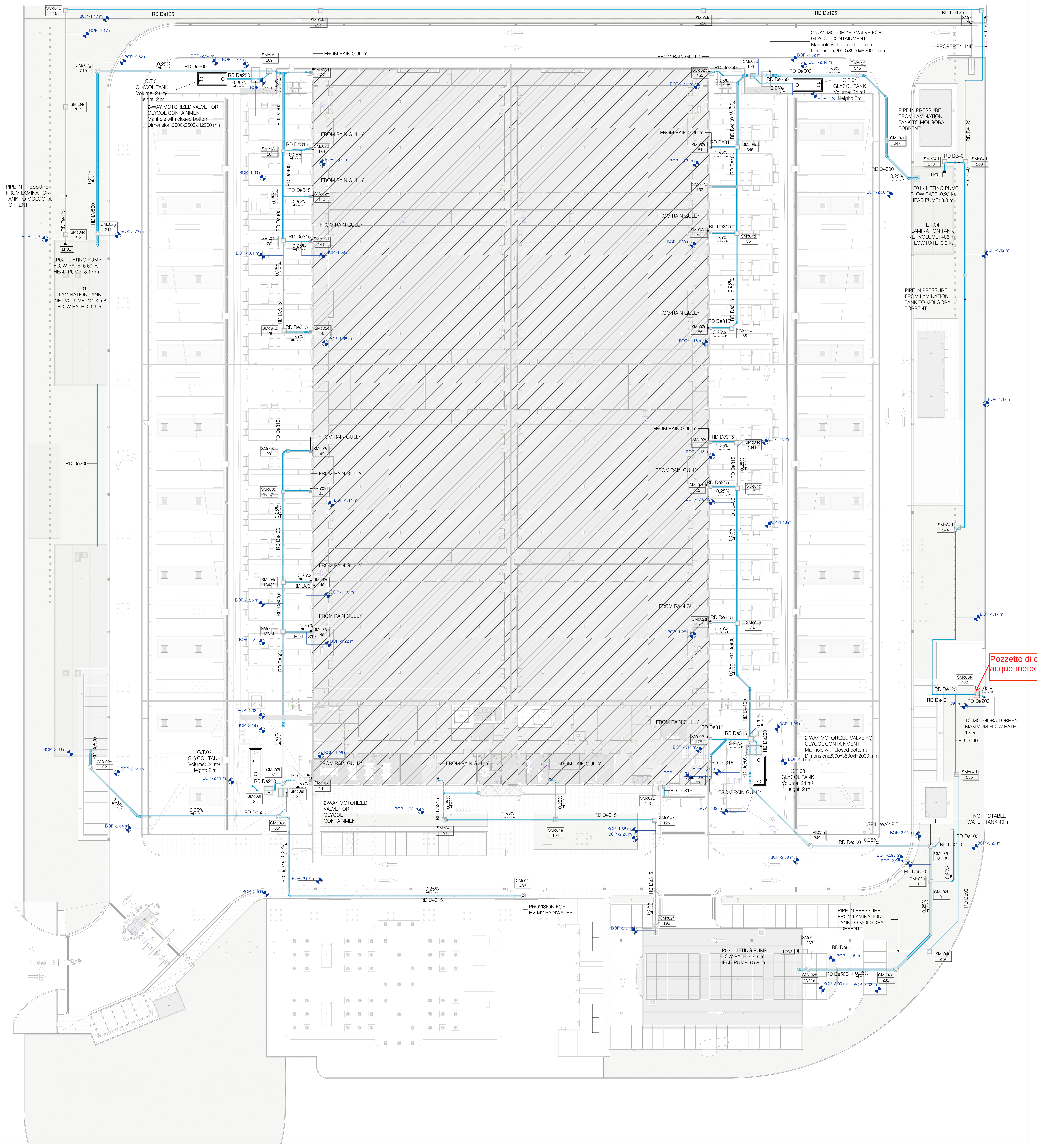


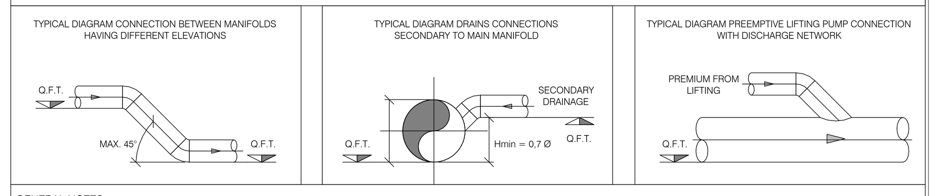
Rainwater Drainage System
1 : 350

DR - Pipe Systems Legend

RD	Rain Water
BOP -2,35 m	Quota Fondo Tubo - BOP *Bottom of Pipe's quote - BOP*

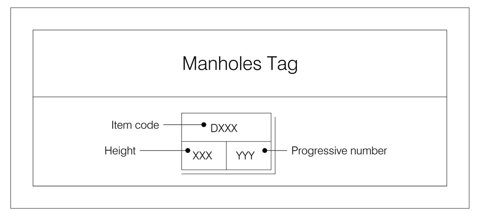
NOTES PLUMBING AND DRAINAGE SYSTEMS:

- Supply piping for the water and sanitary utilities within the toilets will be made of multilayer from manifolds.
- In case of supply not derived from manifold, place recessed shut-off taps with cap for each water utility.
- Provide vents at high points and drains (connected to prepared manholes or conduits) at low points, in locations agreed with the DL.
- All drain risers should be equipped with inspectable siphon at the foot, extended above the roof and adequately ventilated.
- Condensate water collection networks must be separate and distinct from those into which they flow by the interposition of permanently wet or dry inspectable odor trap.
- Graywater collection networks must be separate and distinct from those into which they flow by the interposition of an inspectable siphon.
- Stormwater collection networks shall be separate and distinct from blackwater to the collection sumps located upstream of the Inspection/Siphon/Brace unit feeding to the public sewer.
- All discharges collected below the level of discharge to the public sewer shall be conveyed to collection and lifting tanks equipped with electric pumps.
- Testing operations should be carried out while keeping the drainage network continuously visible.
- Provide inspection points in manifolds upstream of each confluence, bend or special piece.
- All discharge pipes, both main and secondary, except where otherwise indicated, shall have the following minimum slopes:
  - service drains to sewer risers i=0.25%.
  - blackwater / grease collectors i=0.25%.
  - stormwater / condensate manifolds i=0.25%.

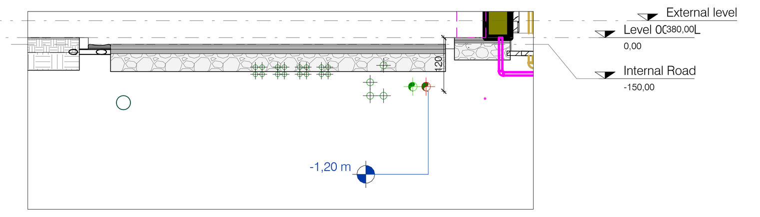


GENERAL NOTES:
- Drawing valid only for mechanical installations under contract.
- All measurements and locations of materials and equipment are to be verified on site by the contractor, who shall promptly report any interference with existing.
- Any undetected equipment shall be maintained; if necessary, it shall be modified and restored by the contractor.
- Exact locations of equipment, materials, piping, ducts, connection to existing facilities shall be determined by the contractor and submitted to the construction manager.
- Final sizing according to the manufacturer of the equipment and materials actually installed.
- All equipment must be easily maintainable and accessible via trapdoors or similar solutions even where not specifically specified.
- It will be the contractor's responsibility to size and asseverate all supports, in a workmanlike manner and in compliance with all regulatory requirements for earthquake-proofing.
- Construction detail drawings necessary for the proper execution of the work shall be arranged by the contractor.
- The installation of elements in the field must comply with all manufacturers' prescriptions and recommendations, good engineering rules on acoustics and fire prevention.
- All planned and described interventions, evaluated on the basis of the available documentation, should be re-evaluated and deepened during the works, after plant verification following appropriate surveys of the existing situation.
- The contractor must carefully check the design and report any inaccuracies, incompleteness or discrepancies with any standard or law.
-Connections between two or more sections of duct both with indoor units and with ducts themselves, shall be made only with invitation fittings and not with hammered derivations or detachments. The Contractor shall be responsible for making construction drawings showing the type of derivations and connections between ducts and ducts with the indoor units provided.

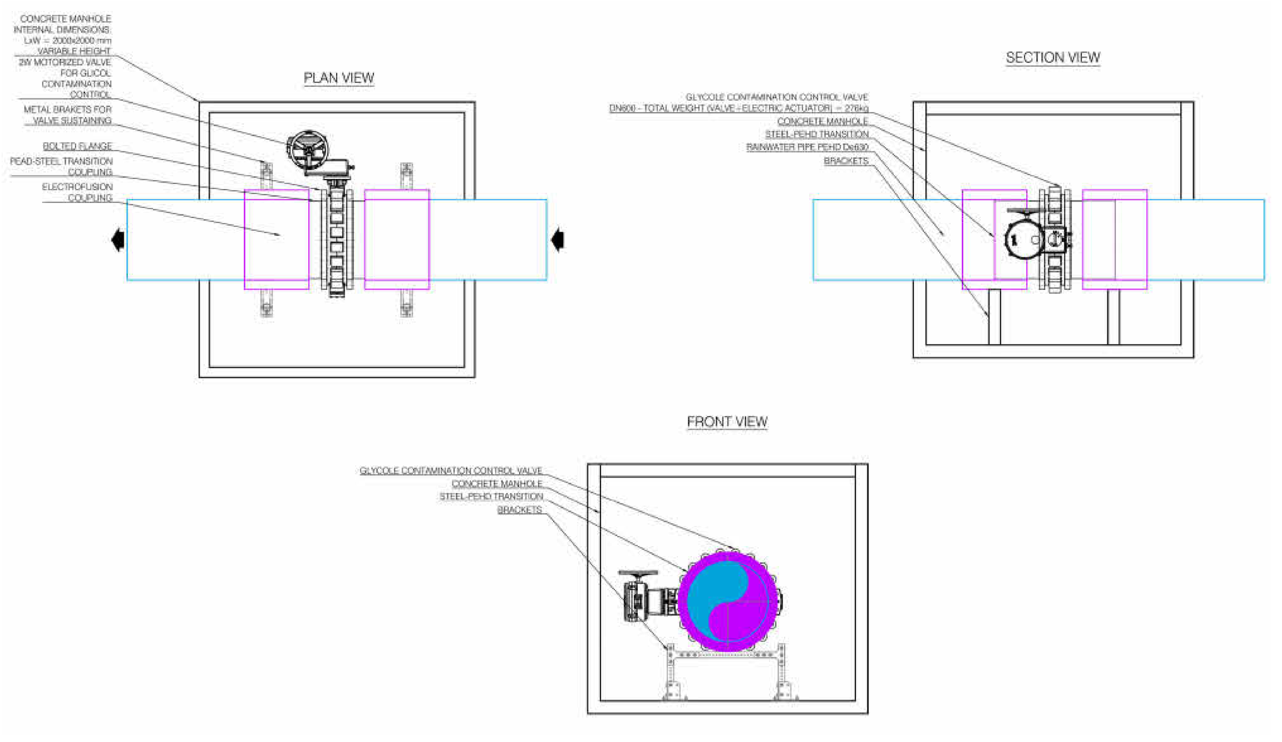
Keynote_Mirror	Description
CMc02f	CLOSED BOTTOM INSPECTION CIRCULAR MANHOLE Dim: Ø1200xH2500 mm
CMc02g	CLOSED BOTTOM INSPECTION CIRCULAR MANHOLE Dim: Ø1200xH2500 mm
CMc02h	CLOSED BOTTOM INSPECTION CIRCULAR MANHOLE Dim: Ø1200xH2500 mm
PMV	CLOSED BOTTOM MANHOLE FOR VALVES INSPECTION
SMc02c	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 500x500xH1000 mm
SMc02d	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 500x500xH1000 mm
SMc03c	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 700x700xH1000 mm
SMc03d	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 700x700xH1500 mm
SMc03e	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 700x700xH1500 mm
SMc04d	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 1000x1000xH1500 mm
SMc04e	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 1000x1000xH2000 mm
SMc05d	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 1200x1200xH1500 mm
SMc05e	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 1200x1200xH2000 mm
SMc08f	CLOSED BOTTOM INSPECTION SQUARE MANHOLE Dim: 2000x2000xH2500 mm



The Level Key Plan shows the levels used for the design. The system dimensions refer to the floor level.
All pipe base heights refer to absolute height as distance from level



NOTE: For teh lamination tanks the required net volume is reported and to be provided.
Position and dimensions are coordinated with other disciplines, as the tanks are cast in place.
For the exact construction dimensions of lamination tanks, refer to the structural documents.



Diesel and glycol motorized valve detail

General Notes

1. This drawing has been checked in accordance with Black & White Engineering (B&W) QA checking procedures.
2. Do not scale from this drawing. All dimensions indicated are in millimeters unless otherwise stated. Validate all measurements on site.
3. All plant and equipment dimensions are typical. The Contractor should show actual, approved plant and equipment sizes.
4. This drawing is to be read in conjunction with all relevant B&W MEP specifications, schedules and standard key to symbols sheet.
5. Any discrepancies between the drawings and other documents should be brought to the attention of the engineer.
6. This drawing is not an installation drawing. It is the Contractors responsibility to make final coordinated installation shop drawings.
7. Final ceiling coordination subject to interior design package.
8. Contractor to coordinate final distribution routes with available sleeves and openings in beams / structure.
9. The contents of this drawing shall be read in conjunction with the current revisions of other relevant Architectural, Structural, Mechanical and Electrical drawings and all relevant sections of the specifications.

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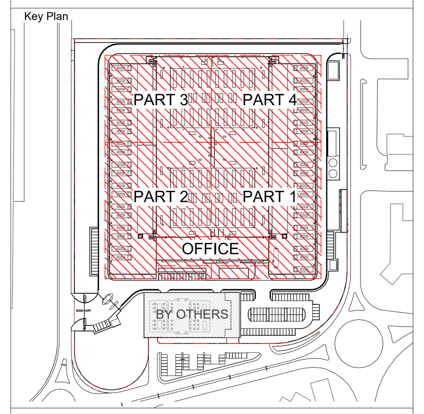
SCALE: 1:100

N

Key Plan



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ROBERTO CEREDA
Data: 30/03/2026 10:53:07

Rev	Details	By / Chkd / App	Date
P03	STAGE 4 - 100% ISSUE	VAA/VAA/MCA	13/03/2026
P03.01	STAGE 4 - 60% ISSUE	VAA/VAA/MCA	29/01/2026
P02	STAGE 3 - 100% ISSUE	APT/GLE/MIC	25/04/2025
P02.01	STAGE 3 - 60% ISSUE	APT/GLE/MIC	21/03/2025
P01	STAGE 2	LGR/APT/GLE	29/11/2024

Client
STACK INFRASTRUCTURE

Lead Consultant / MEP Designer
Office No. 1801
Marina Plaza
Dubai marina
PO Box 27793
Tel: +971 4 365 2228
www.bw-engineering.com

Designer / Architect / Civil
L22
L22 è una divisione di:
Lombardini22 S.p.A.
Via Lombardini 22
T +39 02 36 59 62 00
info@l22.it
20143 Milano, Italia
F +39 02 83 20 13 97
www.l22.it

Structural
SPS Studio Progetti Strutturali
Ing. Antonio Condello
Ing. Arturo Donadio
S.P.S. S.r.l. www.spssrl-mi.it
Via M. Gioia, 64 - 20125 Milano, Italia
segreteria@spssrl-mi.it T. 02/6694887

Project Title
MIL09

Drawing Title
External Services
Sitewide Rainwater Drainage
Overall

Project Status
STAGE 4

Discipline	Status Code
MECHANICAL	**S5**

Project Number	Scale @ A0	Revision
P10508	**1:350**	**P03**

Drawing Number
MIL09-L22-SW-SW-DR-M-90203